

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Claims:**

The claims have been amended as follows:

41. (Amended) A method of increasing light olefin yield during conversion of oxygenates to olefins comprising:
- (a) contacting a feed including an oxygenate in a primary reactor with a small or medium pore non-zeolitic molecular sieve catalyst under first conditions effective to produce a first product including light olefins and a heavy hydrocarbon fraction including heavy hydrocarbons;
  - (b) separating said light olefins from said heavy hydrocarbon fraction;
  - (c) feeding at least a portion of said heavy hydrocarbon fraction to a second reactor selected from the group consisting of said primary reactor and a separate reactor; and
  - (d) subjecting said at least a portion of said heavy hydrocarbon fraction in said second reactor to second conditions effective to convert at least a portion of said heavy hydrocarbons to light olefins.
42. (Amended) A method for increasing light olefin yield during conversion of oxygenates to olefins comprising:
- (a) contacting a feed in a primary reactor with a small or medium pore non-zeolitic molecular sieve catalyst under first conditions effective to produce a first product including light olefins and a heavy hydrocarbon fraction including heavy hydrocarbons;
  - (b) separating said light olefins from said heavy hydrocarbon fraction;
  - (c) feeding at least a portion of said heavy hydrocarbon fraction to a separate reactor; and

- (d) contacting said at least a portion of said heavy hydrocarbon fraction with a second molecular sieve catalyst in said separate reactor under conditions effective to promote conversion of said heavy hydrocarbons to light olefins.

43. (Amended) The method of claim 41 wherein said second reactor contains zeolite molecular sieve catalyst ~~comprises a zeolite~~.

55. (Amended) A method for increasing light olefin yield during conversion of oxygenates to olefins comprising:

- (a) contacting a feed including an oxygenate in a primary reactor with a small or medium pore non-zeolitic molecular sieve catalyst under conditions effective to produce a product including light olefins;
- (b) separating said product into said light olefins and a heavy hydrocarbon fraction including heavy hydrocarbon; and
- (c) recycling at least a portion of said heavy hydrocarbon fraction to said primary reactor.